## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

#### **LISTING OF CLAIMS:**

1. (currently amended): A compound that binds to leukocytes, wherein said compound is represented by the formula (1):

Z-Y-Leu-Phe-(X)<sub>n</sub>-Lys(
$$\underline{NH_2}\underline{NH_2}$$
)<sub>m</sub>- $\varepsilon$ (-R-(T)<sub>1</sub>1-U) (1)

(wherein, in the formula (1),

Z represents a protecting group for an amino group;

Y represents Met or Nle;  $\frac{\text{in }(X)_{n}}{\text{in }}$ 

X represents a spacer consisting of one or more of amino acids and/or synthetic organic compounds;, and

n represents 1 or 0; in  $(NH_2)_{m_7}$ 

 $NH_2$  represents an amide group as a protecting group for a carboxyl group in the  $\alpha$  position of Lys;, and

m represents 1 or 0; in  $\epsilon(-R-(T)_1-U)$ ,

R represents Ser or Thr binding to an ε-amino group of Lys through an amide bond;

T represents a spacer consisting of one or more of amino acids and/or synthetic organic compounds;

1 represents 1 or 0.5 and

U represents a group which can be labeled with a metal;

with the proviso that said X and T may be the same or different from each other).

2. (previously presented): The compound according to claim 1, wherein U in the formula (1) is a group consisting of a peptide represented by –Cys-A1-A2 (A1 and A2 are each an amino acid except for Cys and Pro), nitrogen-containing cyclic compounds with 8 to 20 carbon atoms, nitrogen-containing cyclic carboxylic acid compounds with 8 to 20 carbon atoms, derivatives of nitrogen-containing cyclic carboxylic acid compounds with 8 to 20 carbon atoms or alkylenamine carboxylic acids with 4 to 10 carbon atoms, which can be labeled with a metal.

### 3. (canceled).

**4.** (previously presented): The compound according to claim 1, wherein said compound represented by the formula (1) is one selected from the group consisting of:

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-Cys-Gly-Asn);

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-Cys-Asp-Asp);

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-Cys-Gly-Asp);

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH_2)-\epsilon-(-Ser-D-Arg-Asp-Cys-Asp-Asp);\\$ 

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys (NH_2)-\epsilon - (-Ser-1,4,8,11-tetra azacyclotetra decane-1,4,8,11-tetra azacyclotetra azacyclotetra decane-1,4,8,11-tetra azacyclotetra azacyclotet$ 

1,4,8,11-tetraacetic acid);

 $formyl-Nle-Leu-Phe-Lys(NH_2)-\epsilon-(-Ser-D-Ser-Asn-D-Arg-Cys-\ Asp-Asp);$ 

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-diethylenetriamine pentaacetic acid);

AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Appln. No. 10/528,771

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-1,4,8,11-tetraazacyclotetradecane-butyric acid);

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-D-Arg-Asp-1,4,8,11-tetraazacyclotetradecane-butyric acid);

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-D-Ser-Asn-1,4,8,11-tetraazacyclotetradecane-butyric acid);

acetyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp); carbamyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp); and methyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp).

5. (currently amended): A composition comprising a complex formed between a compound of formula (1) and a metal ion or a metal oxide of The compound according to claim

1 labeled with a radioactive metal or a paramagnetic metal, and a pharmaceutically acceptable carrier: wherein the compound is represented by the formula (1):

 $\underline{Z-Y-Leu-Phe-(X)_{\underline{n}}-Lys(NH_{\underline{2}})_{\underline{m}}-\epsilon(-R-(T)_{\underline{1}}-U)}$  (1)

wherein, in the formula (1),

Z represents a protecting group for an amino group;

Y represents Met or Nle;

X represents a spacer consisting of one or more of amino acids and/or synthetic organic compounds;

n represents 1 or 0;

NH<sub>2</sub> represents an amide group as a protecting group for a carboxyl group in the α position of Lys;

m represents 1 or 0;

R represents Ser or Thr binding to an ε-amino group of Lys through an amide bond;

<u>T represents a spacer consisting of one or more of amino acids and/or synthetic organic compounds;</u>

<u>l represents 1 or 0; and U represents a group which can be labeled with a metal;</u> with the proviso that said X and T may be the same or different from each other.

- **6.** (currently amended): The <u>compositioneompound</u> according to claim 5, wherein said radioactive metal is Tc-99m, In-111, Ga-67, <u>CuCU</u>-64 or Ga-68.
- 7. (currently amended): A method for imaging a site of vigorous leukocyte infiltration accompanied by immune reaction in an individual, said method comprising administering to an individual an effective amount of the composition empound according to claim 6 and conducting SPECT (single photon emission computed technology) or PET (positron emission tomography) imaging on the individual.

## 8-9. (canceled).

10. (currently amended): The <u>composition</u>eompound according to claim 5, wherein said paramagnetic metal is Gd, Fe, Mn or Cu.

- 11. (currently amended): A method for imaging a site of vigorous leukocyte infiltration accompanied by immune reaction in an individual, said method comprising administering to said individual an effective amount of the <a href="mailto:composition-compound">composition-compound</a> according to claim 10 and conducting MRI (<a href="mailto:magnetic resonance">magnetic resonance</a> imaging) on the individual.
- 12. (currently amended): The <u>compositioneompound</u> according to claim 5, wherein said radioactive metal is Y-90, Sn-117m, Sm-153, Re-186 or Re-188.
- 13. (currently amended): A method of radiotherapy, comprising administering to a patient in need of therapy an effective amount of the <u>composition</u>eompound according to claim 12.
- 14. (previously presented): The compound according to claim 2, wherein said compound represented by the formula (1) is one selected from the group consisting of:

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH_2)-\epsilon-(-Ser-Cys-Gly-Asn);$ 

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH_2)-\epsilon-(-Ser-Cys-Asp-Asp);$ 

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-Cys-Gly-Asp);

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-D-Arg-Asp-Cys-Asp-Asp);

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys (NH_2) - \epsilon - (-Ser-1,4,8,11-tetra azacyclotetra decane-1,4,8,11-tetra azacyclotetra azacyclotetra decane-1,4,8,11-tetra azacyclotetra azacyclot$ 

1,4,8,11-tetraacetic acid);

 $formyl-Nle-Leu-Phe-Lys(NH_2)-\epsilon-(-Ser-D-Ser-Asn-D-Arg-Cys-\ Asp-Asp);$ 

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)-ε-(-Ser-D-Arg-diethylenetriamine pentaacetic acid);

# AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Appln. No. 10/528,771

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-1,4,8,11-tetraazacyclotetradecane-butyric acid);

 $formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH_2)-\epsilon-(-Ser-D-Arg-Asp-1,4,8,11-tetraazacyclotetradecane-butyric acid);$ 

formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Ser-Asn-1,4,8,11-tetraazacyclotetradecane-butyric acid);

acetyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp); carbamyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp); and methyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH<sub>2</sub>)- $\epsilon$ -(-Ser-D-Arg-Asp-Cys-Asp-Asp).

15. (previously presented): A composition comprising the compound of any one of claims 5, 6, 10, or 12, and a pharmaceutically acceptable carrier.